

IN THE CLAIMS:

Please amend the claims as follows:

Claim 1 (Currently Amended): An optical information recording medium, comprising:
a substrate having ~~comprising~~ a recording surface provided with a phase pit array for carrying ~~holding~~ information;
a reflective layer formed on the recording surface; and
a protective layer formed on the reflective layer,
wherein each phase pit of the phase pit array is a cavity which is a reentrant as viewed from the entrance side of a reading laser beam so that said reflective layer has reentrants respectively corresponding to said phase pit array.

Claim 2 (Original): The optical information recording medium according to claim 1, wherein the thickness of the reflective layer is less in the inner face of the recess of each phase pit of the phase pit array than in other parts.

Claim 3 (Original): The optical information recording medium according to claim 2, wherein the reflective layer extends over the recording surface and has substantially the same thickness in the direction perpendicular to the principal plane of the substrate.

Claim 4 (Original): The optical information recording medium according to claim 1, wherein the thickness of the protective layer is 0.1 ± 0.03 mm.

Claim 5 (Original): The optical information recording medium according to claim 1, wherein the reading laser beam is a laser beam with a wavelength of 405 ± 5 nm that passes through an objective lens with a numerical aperture of 0.80 or more.

Claim 6 (Original): The optical information recording medium according to claim 5, wherein the maximum value of the reflectance of the reflective layer with respect to the reading laser beam that is subjected to modulation according to the phase pit is in the range of at least 10% and no more than 25%.

Claim 7 (Original): The optical information recording medium according to claim 1, wherein the reflective layer comprises an alloy of which the principal component is Al that comprises at least one of Ti, Cr, Zn, Mn, Cu, Pd, Mg, and Si, and the thickness of the reflective layer is less than 14 nm in the direction perpendicular to the principal plane of the substrate.

Claim 8 (Original): The optical information recording medium according to claim 1, wherein the reflective layer comprises an alloy of which the principal component is Ag that comprises at least one of Pd, Ti, Cu, Si, and Sn, and the thickness of the reflective layer is less than 20 nm in the direction perpendicular to the principal plane of the substrate.

Claim 9 (Currently Amended): An optical information recording medium, comprising:
a substrate having comprising a recording surface provided with a phase pit array for
carrying holding information;

a reflective layer formed on the recording surface; and

a protective layer formed on the reflective layer,

this medium being played back by a reading beam that is a ~~short-wavelength~~ laser beam
having a wavelength of 405 ± 5 nm emitted via an optical system with a ~~high~~ numerical aperture
of 0.80 or more,

wherein each phase pit of the phase pit array is a cavity which is a reentrant as viewed
from the entrance side of ~~the short-wavelength~~ a reading laser beam so that said reflective layer
has reentrants respectively corresponding to said phase pit array.

Claims 10-11 (Canceled).

Claim 12 (Original): The optical information recording medium according to claim 9,
wherein the thickness of the reflective layer is less in the inner face of the recess of each phase
pit of the phase pit array than in other parts.

Claim 13 (Original): The optical information recording medium according to claim 12,
wherein the reflective layer has substantially the same thickness over the recording surface in the
direction perpendicular to the principal plane of the substrate.

Claim 14 (Original): The optical information recording medium according to claim 9, wherein the thickness of the protective layer is 0.1 ± 0.03 mm.

Claim 15 (Original): The optical information recording medium according to claim 9, wherein the maximum value of the reflectance of the reflective layer with respect to the short wave laser beam that is subjected to modulation according to the phase pit is in the range of at least 10% and no more than 25%.

Claim 16 (Original): The optical information recording medium according to claim 9, wherein the reflective layer comprises an alloy of which the principal component is Al that comprises at least one of Ti, Cr, Zn, Mn, Cu, Pd, Mg, and Si, and the thickness of the reflective layer is less than 14 nm in the direction perpendicular to the principal plane of the substrate.

Claim 17 (Original): The optical information recording medium according to claim 9, wherein the reflective layer comprises an alloy of which the principal component is Ag that comprises at least one of Pd, Ti, Cu, Si, and Sn, and the thickness of the reflective layer is less than 20 nm in the direction perpendicular to the principal plane of the substrate.